

## **BOARD RULES AMENDED**

The State Board of Examiners of Electrical Contractors conducted a rules public hearing on September 24, 2009. The following rules were amended and approved:

Board Rules cited as 21 NCAC 18B .0201, .0202, .0801, .0804, .0805, .0901, .1101 and .1102. The effective date of these rules is January 1, 2010. The amended rules write a specialty license classification for electrical wiring carried out by fire alarm system contractors, to make provision for other types of low voltage wiring, and to establish requirements for experience, continuing education, and examination. In addition, the Board seeks to eliminate confusion as to the handling of examination applications by persons with criminal convictions.

### **THE COMPLETE TEXT OF EACH ADOPTED RULE IS BELOW:**

#### **.SECTION .0200 - EXAMINATIONS**

##### **21 NCAC 18B .0201      REQUIREMENTS FOR ALL EXAMINATION APPLICANTS**

- (a) To take an examination in any electrical contracting license classification, the applicant must:
- (1) be at least 18 years of age;
  - (2) submit the required duly filed application as defined in Rule .0210;
  - (3) submit with the application written statements from at least two persons attesting to the applicant's good character; and
  - (4) meet any other requirements set out in Paragraph (b) of this Rule.
- (b) Examination applicants must meet the following requirements for the specified license classifications:
- (1) Limited classification. An applicant must have at least four years of experience, as defined in Rule .0202 of this Section, of which at least two years shall be primary experience. The balance of experience may be primary, secondary or both.
  - (2) Intermediate classification. An applicant must have at least six years of experience, as defined in Rule .0202 of this Section, of which at least four years shall be primary experience. The balance of experience may be primary, secondary or both.
  - (3) Unlimited classification. An applicant must:
    - (A) have at least seven years of experience, as defined in Rule .0202 of this Section, of which at least five years shall be primary experience. The balance of experience may be primary, secondary or both, and
    - (B) submit with the application written statements from at least two persons, who are knowledgeable of the applicant's electrical experience, attesting to the applicant's ability to supervise and direct all electrical wiring or electrical installation work done by an electrical contracting business in the unlimited classification.
  - (4) Single family detached residential dwelling (SP-SFD) classification. An applicant must have at least four years of experience, as defined in Rule .0202 of this Section, of which at least two years shall be primary experience. The balance of experience may be primary, secondary or both.
  - (5) Special restricted fire alarm/low voltage (SP-FA/LV) classification. An applicant must have at least three years of experience, as defined in Rule .0202 of this Section, of which at least two years shall be primary experience. The balance of experience may be primary, secondary or both. An applicant in this classification may also receive creditable experience for service in any of the capacities listed in Rule .0202 that the applicant gained in the low voltage field.
  - (6) Special restricted elevator (SP-EL) classification. An applicant must:
    - (A) have at least four years of experience, as defined in Rule .0202 of this Section, of which at least two and one-half years shall be primary experience. The balance of experience may be primary, secondary or both. An applicant in this classification may also receive creditable experience for service in any of the capacities listed in Rule .0202 that the applicant gained in the elevator field, and
    - (B) include on the application information verifying that the applicant is primarily engaged in, or is regularly employed by and will be the listed qualified individual for a firm that is primarily engaged in, a lawful elevator business in this State.
  - (7) Special restricted plumbing and heating (SP-PH) classification. An applicant must:

- (A) have at least three years of experience, as defined in Rule .0202 of this Section, of which at least two years shall be primary experience. The balance of experience may be primary, secondary or both. An applicant in this classification may also receive creditable experience for service in any of the capacities listed in Rule .0202 that the applicant gained in the plumbing, heating or air conditioning field, and
  - (B) include on the application information verifying that the applicant is primarily engaged in, or is regularly employed by and will be the listed qualified individual for a firm that is primarily engaged in, a lawful plumbing, heating or air conditioning business in this State.
- (8) Special restricted ground water pump (SP-WP) classification. An applicant must:
- (A) have at least two years of experience, as defined in Rule .0202 of this Section, of which at least one year shall be primary experience. The balance of experience may be primary, secondary or both. An applicant in this classification may also receive creditable experience for service in any of the capacities listed in Rule .0202 that the applicant gained in the ground water pump field, and
  - (B) include on the application information verifying that the applicant is primarily engaged in, or is regularly employed by and will be the listed qualified individual for a firm that is primarily engaged in, a lawful ground water pump business in this State.
- (9) Special restricted electric sign (SP-ES) classification. An applicant must:
- (A) have at least two years of experience, as defined in Rule .0202 of this Section, of which at least one year shall be primary experience. The balance of experience may be primary, secondary or both. An applicant in this classification may also receive creditable experience in any of the capacities listed in Rule .0202 that the applicant gained in the electric sign field, and
  - (B) include on the application information verifying that the applicant is primarily engaged in, or is regularly employed by and will be the listed qualified individual for a firm that is primarily engaged in, a lawful electric sign business in this State.
- (10) Special restricted swimming pool (SP-SP) classification. An applicant must:
- (A) have at least two years of experience, as defined in Rule .0202 of this Section, of which at least one year shall be primary experience. The balance of experience may be primary, secondary or both. An applicant in this classification may also receive creditable experience for service in any of the capacities listed in Rule .0202 that the applicant gained in the swimming pool field, and
  - (B) include on the application information verifying that the applicant is primarily engaged in, or is regularly employed by and will be the listed qualified individual for a firm that is primarily engaged in, a lawful swimming pool business in this State.

*History Note:* Authority G.S. 87-42; 87-43.3; 87-43.4; 87-44;  
 Eff. October 1, 1988;  
 Amended Eff. January 1, 2010; March 1, 1999; February 1, 1990.

**21 NCAC 18B .0202 EXPERIENCE**

(a) Primary. As used in this Chapter, primary experience means working experience gained by the applicant while engaged directly in the installation of electrical wiring and equipment governed by the National Electrical Code or work activities directly related thereto. Examples of the capacity in which a person may work in gaining primary experience and the percentages for creditable primary experience are as follows:

	Percentage
(1) journeyman electrician or electrician mechanic, both meaning the same;	100
(2) electrical foreman;	100
(3) electrical general foreman;	100
(4) electrical superintendent;	100
(5) electrical general superintendent;	100
(6) estimator for licensed electrical contractor;	100
(7) electrical inspector recognized as such by the State Department of Insurance;	100
(8) time spent by a professional engineer who is responsible for follow-up project supervision, beyond the point of delivery, in electrical engineering	

	design, or consulting;	100
(9)	full-time instructor teaching National Electrical Code NFPA 72 and related electrical courses at a college, university, community college, technical institute, high school or vocational school;	50
(10)	maintenance journeyman electrician or electrician mechanic employed in a full-time electrical maintenance department;	100
(11)	time actually spent in electrical maintenance by a maintenance journeyman electrician or electrician mechanic regularly employed in other than a full-time electrical maintenance department;	100
(12)	military person holding an electrician rating or rank of at least E-4 who is engaged in land based electrical installations similar or equivalent to work performed by an electrical contractor;	100
(13)	time actually spent in part-time or incidental work in any primary experience category;	100
(14)	time actually spent installing or maintaining fire alarm/low voltage systems;	100
(15)	time as a holder of NICET certification on NFPA 72 Level I, II or III;	50
(16)	time as a holder of NICET certification on NFPA 72 Level IV.	100

In calculating accumulative primary experience, a total of 2,000 hours shall equal one creditable year. The total number of creditable years shall be calculated by dividing the total hours of primary experience by 2,000. Example: Applicant has worked in primary capacity for a total of 7,200 hours of primary experience.

$$7,200 \div 2,000 = 3.6 \text{ years creditable primary work experience}$$

(b) Secondary. As used in this Chapter, secondary experience means working experience gained while engaged in work or training that is related to the installation of electrical wiring and equipment governed by the National Electrical Code. Examples of the type of work or training in which a person may engage to gain creditable secondary experience and the percentages for creditable secondary experience are as follows:

	Percentage
(1) apprentice electrician training in an apprentice program approved by the North Carolina Department of Labor;	100
(2) time spent as an apprentice electrician or helper other than as described in Subparagraph (1) and (3) of this Paragraph;	80
(3) time actually spent in electrical maintenance by a maintenance apprentice or electrician helper regularly employed in other than a full-time electrical maintenance department;	80
(4) student satisfactorily completing National Electrical Code and related electrical courses at a college, university, community college, technical institute, high school or vocational school;	50
(5) time spent by a professional engineer who is not responsible for follow-up project supervision, beyond the point of delivery, in electrical engineering, design, or consulting;	50
(6) electrical construction design under the supervision of a professional engineer;	50
(7) sales representative for an electrical wholesaler, distributor, or manufacturer;	20
(8) appliance service and repair;	20
(9) electric utility lineman; and	10
(10) electric utility serviceman.	20

In calculating cumulative secondary experience, a total of 2,000 hours shall equal one creditable year. The total number of creditable years shall be calculated by applying the percentage for creditable secondary experience and dividing the remainder hours by 2,000. Example: Applicant has 1,000 hours of work experience as a helper or regular apprentice and 2,200 hours of experience while enrolled in an approved apprentice training program: 1,000 hours at 80 percent = 800 hours secondary experience; 2,200 hours at 100 percent = 2,200 hours secondary experience;

$$\frac{800 + 2,200}{2,000} = 1.5 \text{ years creditable secondary experience.}$$

(c) Other Experience. The Board shall approve other experience that it finds to be equivalent or similar to the primary or secondary experience defined in this Rule.

*History Note: Authority G.S. 87-42; 87-43.3; 87-43.4; Eff. October 1, 1988;*

*Amended Eff. January 1, 2010; March 1, 1999.*

## **SECTION .0800 - SPECIAL RESTRICTED LICENSES**

### **21 NCAC 18B .0801 GENERAL PROVISIONS**

(a) Types. A special restricted electrical contracting license classification is a classification established pursuant to G.S. 87-43.3 or by G.S. 87-43.4. Its purpose is to license persons, partnerships, firms, or corporations to engage or offer to engage in only a limited phase of electrical contracting work. Each special restricted license classification is separate from all other special restricted and regular license classifications. The General Assembly created the special restricted single family dwelling electrical contractor license in G.S. 87-43.4. Pursuant to G.S. 87-43.3, the Board has established the following special restricted electrical contracting licenses:

- (1) fire alarm/low voltage wiring license (SP-FA/LV);
- (2) elevator license (SP-EL);
- (3) plumbing, heating, and air conditioning license (SP-PH);
- (4) groundwater pump license (SP-WP);
- (5) electric sign license (SP-ES); and
- (6) swimming pool license (SP-SP).

(b) Limited Scope. A special restricted contracting license does not authorize the licensee to engage or offer to engage in the business of electrical contracting in general. It authorizes the licensee to engage or offer to engage only in the limited phase of electrical contracting described in the Rule in this Section that specifies the scope of the applicable special restricted license.

(c) No Project Value Limit. The limitations concerning the dollar value of projects that may be undertaken by a limited or an intermediate licensee do not apply to special restricted licensees. Thus, the holder of a special restricted license may engage or offer to engage in any project authorized by the license regardless of the dollar value of the project.

(d) Effect of Regular License. A licensee in the regular license classifications, whether limited, intermediate or unlimited, is qualified to engage or offer to engage in any activity authorized by a special restricted license, subject to the project value limitations contained in G.S. 87-43.3, and does not have to obtain a special restricted license.

*History Note: Authority G.S. 87-42; 87-43.3; 87-43.4;  
Eff. October 1, 1988;  
Amended Eff. January 1, 2010; February 1, 1995; February 1, 1990.*

### **21 NCAC 18B .0804 SCOPE OF SP-FA/LV LICENSE**

(a) Definition. As used in this Chapter, fire alarm, burglar alarm and low voltage wiring systems are defined as:

- (1) wiring systems of 50 volts or less and control circuits directly associated therewith;
- (2) wiring systems that have a voltage in excess of 50 volts and consist solely of power limited circuits meeting the definition of a Class II or Class III wiring system in the National Electrical Code;
- (3) line voltage wiring that has a voltage not in excess of 300 volts to ground and is installed from the load-side terminals of a disconnecting means or from a junction box, either of which has been installed by others, for the specific purpose of supplying the low voltage wiring system involved. Some low voltage wiring systems that meet this definition are exempt under Rule .0805;
- (4) interconnected components wired to a common control panel either as a standalone fire alarm system or as part of a combination burglar/fire system to monitor and annunciate the status of evidence of flame, heat, smoke or water flow within a building or structure in accordance with the requirements of the N.C. State Building Code and NFPA 72; or
- (5) alarm system or devices used to detect burglary or theft as defined in G.S. 74D-2(a).

(b) Scope. A special restricted fire alarm/low voltage electrical contracting license authorizes the licensee to install, maintain, or repair only low voltage wiring and directly related wiring. Wiring is directed related if it:

- (1) originates at the load-side terminals of a disconnecting means or junction box that:
  - (A) has been installed, complete with line-side connections, by others for the purpose of supplying the low voltage wiring system involved; and
  - (B) is permanently and legibly marked to identify the low voltage wiring system supplied; and
- (2) is not installed in a location considered as hazardous under the National Electrical Code.

*History Note:* Authority G.S. 87-42; 87-43.3;  
Eff. October 1, 1988;  
Amended Eff. January 1, 2010.

#### **21 NCAC 18B .0805 EXEMPTION OF CERTAIN LOW VOLTAGE WIRING SYSTEMS**

Exemption. Except a fire alarm, burglar alarm or low voltage wiring system as defined in Rule .0804, the installation, maintenance, or repair of low voltage wiring systems may be performed by those not licensed by the Board if all of the following conditions are met:

- (1) the system is not required by the N.C. State Building Code;
- (2) the low voltage control circuit and power supply is a Class II or Class III system as defined in the National Electrical Code other than described in Rule .0804;
- (3) the system operates at a voltage not in excess of 50 volts or meets the provisions for sound-recording and similar equipment in the National Electrical Code;
- (4) no part of the system is installed in an area considered as hazardous under the National Electrical Code;
- (5) the system is current limited or protected by a circuit breaker, fuse, or other current limiting device; and
- (6) a failure in the system would not, in the opinion of the electrical inspector having jurisdiction, create a shock or fire hazard to persons or property.

*History Note:* Authority G.S. 87-42; 87-43.3;  
Eff. October 1, 1988;  
Amended Eff. January 1, 2010.

### **SECTION .0900 - VIOLATIONS AND CONTESTED CASE HEARINGS**

#### **21 NCAC 18B .0901 APPLICANTS CONVICTED OF CRIMES**

The Board shall not consider the examination application of a person who has been convicted of a crime involving fraud or moral turpitude until at least one year has elapsed following the applicant's completion of the terms and conditions of any punishment for the conviction, except for unsupervised probation.

*History Note:* Authority G.S. 87-42; 87-43.3; 87-43.4; 87-47(a1)(4);  
Eff. October 1, 1988;  
Amended Eff. January 1, 2010; April 1, 1995; February 1, 1990.

### **SECTION .1100 - CONTINUING EDUCATION**

#### **21 NCAC 18B .1101 CONTINUING EDUCATION REQUIREMENTS: LISTED QUALIFIED INDIVIDUALS**

(a) Every listed qualified individual, including listed qualified individuals pursuant to G.S. 87-50, shall complete continuing education for each annual license period to renew the license on which the qualified individual is currently listed, for the next annual license period, except as follows:

- (1) individuals becoming qualified by examination during the 12 month period immediately preceding the license renewal date;
- (2) qualified individuals unable to fulfill the required number of hours as the result of illness as certified in writing by the attending physician; or
- (3) persons presenting approved courses of continuing education.

(b) The number of required contact hours for every listed qualified individual shall be determined by the classification of license on which the qualified individual is currently listed as follows:

- (1) qualified individuals currently listed on a license in the limited, intermediate, unlimited and special restricted single family dwelling classifications shall complete at least eight hours of approved continuing education for license renewal, and
- (2) qualified individuals currently listed on a license in the special restricted fire alarm/low voltage (SP-FA/LV), special restricted elevator (SP-EL), special restricted plumbing and heating (SP-PH),

special restricted ground water pump (SP-WP), special restricted electric sign (SP-ES) and special restricted swimming pool (SP-SP) classifications shall complete at least four hours of approved continuing education for license renewal.

(c) The Board, pursuant to Rules .1102 and .1103 of the Section, approves courses. Because of differences in the electrical contracting industry and individual needs of listed qualified individuals, each qualified individual must exercise judgment in selecting courses for which continuing education is claimed and in choosing only those courses that will advance the individual's knowledge.

(d) Course sponsors may be colleges or universities, community colleges, trade associations, providers of self-study programs, employers, third party professional examination companies, private instructors and the like.

(e) North Carolina listed qualified individuals residing within the state must obtain the required continuing education hours by taking a course provided by an approved sponsor.

(f) North Carolina listed qualified individuals residing outside of North Carolina, including listed qualified individuals pursuant to G.S. 87-50, may obtain credit for courses offered in North Carolina. They may also obtain credit for courses offered in their state, province or country of residence provided the Board subsequently approves the courses taken, pursuant to Rule .1102(b) of this Section.

(g) Effective for renewals on or after July 1, 2008, all persons seeking to renew qualification must demonstrate that a minimum of one-half the continuing education hours for each annual license period were obtained by in-person classroom or seminar attendance.

*History Note: Authority G.S. 87-42; 87-44.1;  
Eff. October 1, 1990;  
Amended Eff. January 1, 2010; January 1, 2006; March 1, 1999.*

#### **21 NCAC 18B .1102 MINIMUM REQUIREMENTS FOR COURSE SPONSOR APPROVAL**

(a) Each course sponsor shall submit an application for continuing education course sponsor approval to the Board on a form provided by the Board by March 1 prior to the fiscal year (July 1 - June 30) in which the course will be offered. The application shall include:

- (1) the name of the sponsor;
- (2) sponsor contact person, address and telephone number;
- (3) course title and outline;
- (4) course contact hours;
- (5) schedule of courses, if established, including dates, time and locations;
- (6) course fee; and
- (7) names and credentials of each instructor.

(b) To qualify as an approved continuing education course sponsor:

- (1) all courses offered by the sponsor shall last no fewer than two contact hours required for the license classification pursuant to Rule .1101(b) of this Section; and
- (2) all courses offered by the sponsor shall cover articles of the current National Electrical Code; NFPA 72 and reference materials for Fire Alarm Systems; G.S. 87, Article 4; 21 NCAC 18B; or other subject matter satisfying the requirements in G.S. 87-44.1 as approved by the Board.

(c) The course sponsor or instructor shall provide the Board with a certified class roster of all attending qualified individuals within 30 days after the completion of each course.

(d) The course sponsor or instructor shall provide each attending qualified individual with a certificate of completion within 30 days after completion of each course.

(e) The Board shall approve or deny applications at its April meeting.

(f) Upon approval of the application, each approved sponsor shall agree to conduct courses in accordance with this Section and the applicant shall indicate its agreement by signing a continuing education sponsor agreement form provided by the Board.

*History Note: Authority G.S. 87-42; 87-44.1;  
Eff. October 1, 1990;  
Amended Eff. January 1, 2010; January 1, 2006; March 1, 1999.*